# NUCLEAR DIVISION NEWS

A Newspaper for Employees of the Nuclear Division, Union Carbide Corporation

Vol. 2 — No. 3

OAK RIDGE, TENNESSEE

Thursday, February 11, 1971

### Fences About Down, **Hibbs Tells Rotary**

The importance of the interrelationships between Oak Ridge and Knoxville was stressed by Roger F. Hibbs, president of the Nuclear Division, at a recent meeting of the Downtown Knoxville Rotary Club.

Hibbs, recalling the early days of Oak Ridge, said that for a long time the very nature of the activity discouraged contact with surrounding communities. He added that after the fences around Oak Ridge came down, they continued to exist psychologically for many people.

"Those fences have now pretty well rusted out of sign and mind." he said. "Their disappearance has been hastened by the development in the last number of years of many mutually beneficial relationships between Oak Ridge and The University of Tennessee and the Tennessee Valley Authority, as well as between Oak Ridge and the business and cultural community of Knoxville.'

#### **Education Field**

Hibbs said that an item of great Fund drive. importance is the fact that more than 20 percent of the Oak Ridge labor force — in excess of 3,000 people - come from Knoxville. 'As a matter of fact, only about 40 percent of our employees live Board of Directors of the Campin Oak Ridge. Some of our employees travel more than 100 miles a day to and from work in Oak Ridge. As a result, Oak Ridge has and the Oak Ridge Playhouse. developed a regional flavor, and its many significant contributions reflect favorably on this entire part of the state.

Hibbs explained that one of the most important relationships which has developed between Oak Ridge and Knoxville is in the field of education. For example, to increase the number of people with advanced degrees in biomedicine, personnel from Union Carbide and The University of Tennessee developed the UT-Oak Ridge School of Biomedical Sci-

#### 1,200 TAT Graduates

Another example is the Training and Technology Program, which is designed to give training for responsible jobs with industry to persons who are unemployed or underemployed. "The University of Tennessee has contributed significantly to this program, particularly in the fields of counseling and curriculum development,' he said.

"Since its inception, approximately 1,200 persons, more than 30 percent of whom are black, have participated in the program. Currently, about 95 percent of these people are employed in jobs that average three times the pay of their previous experience. There is no doubt that without the participation of the University, this success could not have been achieved," Hibbs added.

Discussing the activities at the Oak Ridge facilities, Hibbs devoted much of his presentation to work being done to meet the energy needs of the world, now and for the future.

#### Power from the Atom

"I happen to believe that one of the best sources of energy available to us today is the atom," he (Continued on Page 6)

## Executive Changes Announced by Union Carbide

Birny Mason, Jr., has announced his decision to retire as chairman of the board and chief executive officer of Union Carbide Corporation, effective April 21, after more than 38 years of service with the corporation.

Mason announced that management changes proposed by him have been approved by the directors of the corporation and are planned to become effective following the annual meeting of stockholders April 21. Under the plan, F. Perry Wilson will become chairman of the board and chief executive officer, William S. Sneath will become president of the corporation, with James R. Johnstone and William B. Nicholson being advanced to vice chairmen. Mason, who is aged 62, and Kenneth H. Hannan, now vice chairman and aged 60, will retire as officers of the corporation, with Mason continuing as a member of the board of directors and chairman of the executive committee.



In announcing his decision, Mason noted that he has been Union Carbide's senior executive officer for more than 10 years and is now in a position to turn over responsibility for the corporation's affairs to a new management that is widely experienced and fully qualified to conduct its worldwide operations.

Nicholson and Johnstone have many years operating experience, both domestically and overseas, Both are presently group vice presidents of the corporation. Johnstone is in charge of four research chemist, later serving as major domestic divisions, as well as all operations in Africa. Nicholson is currently responsible for all operations in Latin America and Canada, in addition to corporate technology and development activities.

#### 230,000 Stockholders

Union Carbide is a worldwide organization that serves a broad group of consumer and industrial customers in over 100 countries on every continent. In 1970, sales were a record of \$3,026,000,000, earnings were \$159,400,000.

The corporation is a publicly owned company with approximately 230,000 stockholders. At the end of 1970 about 115,000 people were employed by the corporation and its majority owned companies throughout the world.

It's Not Too Late

The American Red Cross

Bloodmobile is back in town

today collecting some 450 pints

of blood needed to maintain

the community's "blanket pro-

tection" under the Anderson

Volunteers will be on hand

to help you from 11 a.m. to 5

p.m. today at the National

Guard Armory off Oak Ridge

Turnpike. On Wednesday, the

Bloodmobile was here from 4

to 10 p.m., hours specifically

designed for the convenience

of Nuclear Division employees

and other working people. If

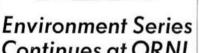
you're on duty today, please

call the Red Cross (483-0211)

anyway and they will schedule

you for some subsequent visit.

County Blood Program.



Charles A. Blake

Blake to Head

Charles A. Blake, Equal Em-

ployment Opportunities Coordi-

nator for Union Carbide Corpor-

ation's Nuclear Division, has been

named drive chairman for the

1971 Anderson County United

A United Fund leader for a

number of years, Dr. Blake served

in 1969 as general chairman of

the Nuclear Division drive and has served as a member of the

fire Girls. He has been active in

many community affairs, includ-

ing the Oak Ridge Arts Council

He has been with Carbide since

group leader in the Chemical

1950, when he joined the Oak

Ridge National Laboratory as a

Technology Division. From 1958

to 1968, he served in the recruit-

ing of persons with college de-

grees and, in 1968, was appointed

to his present position of EEO

Coordinator. He also serves as

chairman of the Nuclear Divi-

sion's Advisory Committee for

Dr. Blake will be in charge of

planning and executing the UF

campaign throughout Anderson

County. The 1971 goal is expected

Professional Staffing.

to be about \$300,000.

for Tuesday afternoon (February 16) in the ORNL series of enthe "intelligent generalist."

E. J. Witkowski will speak on "Plant Operations at X-10 and the Environment," and D. J. Rose will present an Environmental Wrap-up and Review." Interested persons from all Nuclear Division plants are invited. The session will be held from 3 to 4:30 p.m. in the East Auditorium of Building 4500 at ORNL.

The talks are the final two in a series of 12 which were planned to present information about the various environmental projects underway at the Laboratory. The project was sponsored by ORNL's office of Biomedical and Environmental Sciences, under the direction of Dr. J. L. Liverman.



William S. Sneath

#### Named President

William S. Sneath was born in Buffalo, N.Y. He is a graduate of Williams College with a degree received in 1947. He also has the degree of M.B.A. received in 1950 from Harvard Graduate School of Business Administration.

The new Carbide president joined the organization in 1950 in the General Accounting Department. In 1956, he moved to the Finance Department of the corporation. He was appointed an assistant secretary and assistant treasurer in May of 1961 and later in that same year became treasurer. In 1965, he was elected vice president and treasurer and designated as chief financial officer In 1968 he was elected a director and at the present time is a vice president of the corporation, a member of the general operating committee, and chief financial of

Sneath is a member of the National Industrial Conference Board's Council of Financial Executives, a trustee of the Citizens Budget Commission of New York City, a member of the New York City Chamber of Commerce and a member of its Committee on Finance and Banking, and a Voting Member of the Associated Hospital Service of New York. In addition, he belongs to the Harvard Club of New York City, the Riverside Yacht Club, Stanwich Club, Pine Valley Golf Club, and the Treasurers Club.

He lives at 33 Club Road in Riverside, Conn., and is married to the former Nancy Thornton. They have three sons, William S., James T., and Scott C., and three daughters, Caroline, Anne and Emily. Sneath's special interests include skiing, golf, and sailing.

He served in the United States Naval Reserve from 1943 to 1956. During that time he was on active duty from 1944 to 1946 and tive duty from 1944 to 1946.

#### 215th Dividend!

The board of directors of Union Carbide Corporation has declared its 215th dividend of fifty cents a share on the outstanding capital stock of the corporation payable March 2, to stockholders of record at the close of business Feb. 5. April 9.



F. Perry Wilson

#### **New Chairman**

F. Perry Wilson, recently named chairman of the board of Union Carbide Corporation, is a native of Manson, N. C. He is an alumnus of North Carolina State University where he was graduated in 1936 with a B.S. degree in chemical engineering.

He joined Union Carbide in 1941 at the corporation's plastics laboratory in Bloomfield, N. J. In 1949, he moved to Union Carbide Canada Limited and, in 1954, was appointed president of this subsidiary's plastics group. Later he became a vice president of Union Carbide Limited at Toronto and following that executive vice president and director. He moved to New York in 1961 as a vice president of the former Union Carbide International Company and was appointed executive vice president in 1963 and president in 1964. In 1966, he was elected a corporate vice president and at the same time chairman of the board of Union Carbide Eastern, Inc. In 1967, he was elected group vice president with responsibility in the areas of chemicals, plastics and olefins. Wilson was elected president and a director of the corporation in June, 1969.

He is a member of the New York Chamber of Commerce, and Apawamis Club.

Wilson lives in New York City and is married to the former Isabel Agemian. They have a son, F. Perry, Jr., and a daughter, Vivian L. (Mrs. Frederic) Kie-

In his leisure, Wilson enjoys golfing and fishing.

#### **Monday Holiday**

Monday, February 15, is an official holiday for Nuclear Division employees, as we observe the first of the newly appointed week - end'holidays, George Washington's birthday.

Only those whose presence is required for continuous operation or security of the plants will have to work Monday.

The next holiday will also be a 'week-end' one . . . Good Friday,

## Continues at ORNL

Two more talks are scheduled vironmental seminars geared to

## 'In Vivo' Body Counter Vital Supplement to Radiation Checks

By J. A. YOUNG

What did you do?

"I went to sleep."

"That's the first good rest I've had in a month.'

"You just lie there and enjoy the music."

"You think, and think, and think."

"I counted the songs on FM. We went through seven. The Streisand number I liked best... you know the one about hating to see the morning!"

Comments? Typical of the reactions of employees going through the Body Counter.

Have you ever been counted by the IVRML? . . . . the In Vivo Radiation Monitoring Laboratory, or in short, the Body Counter?

Some 3,000 Y-12 and Oak Ridge Gaseous Diffusion Plant employees are measured yearly by the IVRML. The counter was put into regular operation in 1961 as a complementary program to the urine analysis program . . . or urinalysis as it is commonly called among our technicians. Persons who handle radioactive material in their normal day's work are frequently checked making sure that permissible levels of exposure are never passed.

#### 'Alien' Sources Removed

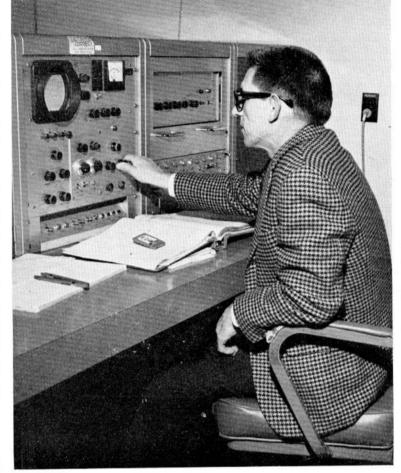
The information is computerized and studied and programmed into past experience with other employees' readings as well as your own (standards . . . as they call it in Health Physics.) Experts who study the results can tell your approximate age, how active a human being you are, and at the readings!

First, you take a shower. The scanner on the IVRML is so sensitive that even the most remote piece of dust from the "outside' might cause an error in the computations. Not that employees carry radioactive sources around on their bodies and clothing. But even the most remote possibility of contamination is removed before the body is counted. Special coveralls are issued so that uncontaminated clothing can be worn inside the monitoring area.

#### Always in Voice Contact

You are weighed. Other information taken includes your name, badge or identification number, work area, job description, height, age, sex, chest thickness and abdominal thickness

An operator is stationed outside the monitoring room (called the "Iron Room") at all times. He is



ANALYZER — J. D. Hall, Radiation Safety, monitors the IVRML as it 'reads' radiation emitting from sources in H. P. Prewett's body. The pulses are programmed to calculate the amount of uranium-235, natural uranium, thorium, potassium-40, and cesium-137 in the subject.

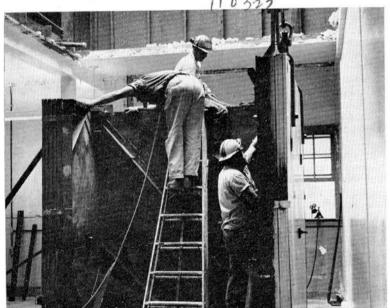
subject being studied.

after one developed at the Argonne National Laboratory. It is eight feet square made up of 32 sheets of one-quarter inch thick steel for the laminated walls, floor and ceiling. The massive door also is shielded. The construction is of the platform type, with the vertical walls built around an angle iron frame on the floor. The ceiling overlaps the vertical sides to block direct radiation entry paths into the cham-

Conditioned air is drawn from the room through a filter and distributed into the counting room.

A subject in the counting room is isolated from natural radiation almost entirely.

Radiation is something man has



'IRON ROOM' CONSTRUCTION-Y-12 craftsmen erect the four walls of the IVRML 'Iron Room,' which consist of 32 one-quarter inch steel plates. The room, shielded at top and bottom also, eliminates natural radiation from outside

whether you are a heavy milk there to process data taken from lived with a long time, much consumer or not, just by looking previous exams, to observe the longer than he ever realized. We accumulating data on the subject, have been exposed to radiation and to be in voice contact with the since the world began in the form of cosmic rays from space and Y-12's Iron Room was fashioned radioactive materials common to our soil and air.

The IVRML detects the kinds and amounts of certain radioactive substances that may have accumulated in the body from natural sources, industrial exposure. man-made fallout, or from trace radioisotopes given for medical purposes.

#### No Discomfort

One of the great things about the Body Counter is that it doesn't hurt . . . there are no shots, no cathodes attached to you. You accathodes attached to you. You actually lie still in the Iron Room Operations of the Atomic Energy Division. for about 30 minutes, listening to pleasant music piped in from a local FM station.

The body counter actually consists of three basic elements: (1) a shield to minimize radiation from sources other than the body being counted; (2) detectors which react to the radiation emitted by some radioactive isotopes; and (3) an analyzer which receives and records these reactions so that the kind and amount of the radioactive substance can be determined by comparisons with known standards.

#### IVRML Vital Supplement

Everyone contains radioactive materials in his body. Radioactive potassium-40, which constitutes a small percentage of natural potassium, is usually the most abundant radionuclide in man. However, as a result of atmospheric atomic testing, the body also contains small amounts of cesium-137. In our part of the globe, cesium-137 comes from the consumption of meat and milk of cows, which have eaten grass which has been exposed to fallout. The average amount of cesium-137 in a population of people varies with location, diet and the rate and extent of atmospheric testing (now banned by the Nuclear Test Ban Treaty.)



RELAXED COUNTING-H. P. Prewett, Jr., Fabrication System Development in Y-12, relaxes under the Body Counter in the 'Iron Room' of the In Vivo Radiation Monitoring Laboratory. The routine checks act as a supplement to the entire efforts of the Nuclear Division in monitoring radiation

The detection capabilities of the Commission. Mounted on a trac-IVRML proves to be a valuable tor-trailer truck, it is equipped supplement to the urinalysis program here in the event of accidental exposures to abnormal concentrations of uranium. Results of the counting are made available to the subject employee.

#### Mobile Counter, Too

In addition to the two labs, one in the Oak Ridge Y-12 Plant. and poration at Portsmouth, Ohio. one at Oak Ridge National Laboratory; Y-12 operates a mobile clear Division's Radiation Safety counter built for the Oak Ridge Department, in Y-12's Technical

with a sleeper-type cab, making it possible to transport the unit long distances in a minimum time.

The mobile unit serves the three AEC installations here, the Paducah Gaseous Diffusion Plant, National Lead at Fernald, Ohio; and the Goodyear Atomic Cor-

The IVRML is part of the Nu-



DATA STORED—The 'readings' from the IVRML are stored on computer tapes and compared with previous norms or regular standards. Co-op students Danny A. Brakensiek and Wayne S. Watts, left to right, examine the computer tape before storing it.



# —Y-12 BULLETIN

Thursday, February 11, 1971



February finds scores of Y-12ers marking important dates with Union Carbide Corporation. Con-

#### 25 YEARS

Dewey J. Nichols, Beta Two Chemistry, February 2.

William T. McBryde, Laboratory Operations, February 5.

Walter W. Rice, Production Assay, February 14.

#### 20 YEARS

Homer R. Ellis, Dimensional Inspection, February 1.

Claude M. Williams, Gage Certification Laboratory, February 1 Jack L. Gamble, A-2 Shops, 9212, February 1.

Mosė Sanders, Building Services, February 2.

Clarence L. Hawkins, Jr., General Machine Shop, February 2. **Dolphus L. Holbert**, 9215 Roll-

ing Department, February 5.

Clyde C. Beeler, General Ma-

chine Shop, February 5. Buford L. Fain, Utilities Admin-

istration, February 5. Carl H. Manis, Buildings, Grounds and Maintenance Shops,

February 5.

James E. Hale, Jr., 9766 Ma-

chine Shop, February 5.
Levator G. Cotter, Material

Specimen Shop, February 5. John G. Scogin, Process Maintenance, February 5.

Judge D. Kile, Beta Four Heavy Machine Shop, February 6.

Edward S. Jackson, Alpha Five
Processing, February 6.

Paul Surber, Guard Department, February 7.

Okley E. West, Stores Department, February 7.

James G. McArthur, Graphic Arts, February 8. Willis B. Davis, Guard Depart-

ment, February 9.
Eva M. Lowe, Chemical Ser-

vices, February 12. Sherman L. Ray, Guard Depart-

ment, February 12. William Warmley, Jr., Building

Services, February 12. Harry Baker, Area Five Mainte-

nance, February 12. Johnnie C. Jordan, Jr., Gage Certification Laboratory, Febru-

Helen Y. Stone, Superintendents Division, February 12.

James D. Burns, Jr., Alpha Five

Processing, February 12.
Charles R. Williams, Process

Maintenance, February 13. Charles R. Coston, General Ma-

chine Shop, February 13. Herbert W. True, General Expediting and Auxiliary Services, February 13.

William E. Chadwick, General Can Fabrication Shop, February

Guy L. Tate, General Expediting and Auxiliary Services, February 14.

John T. Gallups, Area Five Maintenance, February 15.

#### 15 YEARS

James A. Young, General Industrial Relations, February 1.

Thomas D. Bagwell, Electrical and Electronics, February 2.

Miles W. Bailey, Alpha Five Processing, February 5. Noble G. Young, Jr., Alpha Five

West Shop, February 8. (Continued on Page 4) 21st Annual Meeting of Credit Union Shows Assets in Excess of \$8 Million

Y-12's Credit Union came of age | gress in October of last year. (The annual meeting! The meeting was unions, is available to all shareheld January 20 at the Roberts- holders without extra costs.) ville Junior High School in Oak

are now well in excess of \$8,000,-000. He also stated that the credit group was able to pay five and one-quarter percent dividends during 1970, declared and compounded quarterly.

Since January 1, Blakely pointed out, all members of the Y-12 credit group are now insured up to the \$20,000 maximum with share deposit insurance, made possible by a bill established by Con-

#### 'Platform' Group Honors Development's Schreyer

J. M. Schreyer, superintendent of Development Division's Chemistry Development Department, has been elected to the membership of the International Platform Association.

This group, which evolved from one founded 150 years ago by Daniel Webster, is composed of distinguished orators from 55 na-tions. Its present membership lists many celebrities of the press, TV, radio, movies, theatre and government. Among other accomplishments, the membership has been instrumental in improving the quality of assembly programs available to school children. Individuals may not apply for membership, but must be recommended and approved by other IPA members who have heard them deliver platform addresses.

Schreyer has been a popular lecturer at a number of univer-

recently, staging its twenty-first insurance, long a goal of credit

James F. Morehead and Harley C. Orange were reelected to the President J. P. Blakely pointed board of directors. Lorena Matout that the assets for the Y-12 thews, treasurer and manager, was Employees Federal Credit Union also reelected to the credit com-

> W. L. Boutwell and G. G. Wilson walked away with color television sets, given as door prizes. A total of 25 Y-12ers also took hams away.

> Last year, members made 6,927 loans from their credit union, totalling \$7,294,474.96. The money borrowed by eligible members was spent to purchase automobiles, real estate, educations, campers, trailers, boats, motors, and various appliances.

> The financial condition of Y-12's credit union was reported in a healthy, growing condition. Member shares in savings stand at a new high of \$7,376,378.25.

#### BULLETIN!

Lorena Causey Matthews, Y-12's credit union manager, was notified late on February 4 that President Nixon had appointed her as one of the six directors of the new National Credit Union Agency Advisory Board. She will represent the southeast region, which covers Kentucky, Tennessee, North and South Carolina, Mississippi, Alabama, Georgia, Florida, The Canal Zone, and Puerto Rico.

#### Badminton, Anyone?

Informal badminton for all employees and their wives takes place every Thursday at the Old Jefferson Junior High School Gymnasium. Informal schedules are set at 7:30 and 9:30 p.m. All equipment is furnished . . . just show up with gym shoes and go



SAFETY AWARDS-E. L. Zachry, left, presents J. E. Calloway his safety award certificate for 1970's outstanding record. R. E. McFalls, center, awaits his. All three Y-12ers are in Buildings, Grounds and Maintenance Shops. McFalls admitted his wife is going to spend his award. Calloway is buying a Coleman lantern. Zachry says he hasn't decided what to buy yet!



James D. Griffin

### Passes Exam As **US Patent Agent**

James D. Griffin has been notified that he is a registered patent agent. He recently passed the intensive examination which allowed him to certify. The examination itself required six hours to complete in addition to many weeks of preliminary study. Rigid education qualifications are asked also prior to making application for the exam.

Griffin, of the Legal Department, was notified, along with Herman Holsopple and Martin Skinner, both of Oak Ridge National Laboratory, that he had successfully passed the examina-

Griffin, a native of Lexington, Ala., has been in the Legal Department since 1960. He formerly worked at Oak Ridge Gaseous Diffusion Plant as a laboratory

He holds a B.A. degree from State Teacher's College, Florence, Ala, and has done extensive graduate work at The University of Tennessee.

He and his wife, the former Betty Sims, live at 2900 Staffordshire Boulevard, Powell, with their three children, Susan, Jane and Andy.

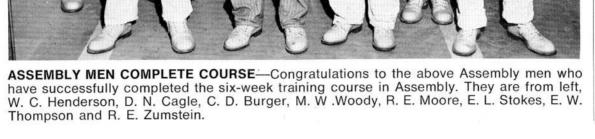
#### **Instrument Engineers** Stake C League Lead

Instrument Engineers still stand tall in C Bowling action after six weeks of play into the league's second half.

Elmer Hawk, Sunflowers, rolled ome fancy scores recently, posting a 246 scratch, 267 handicap game . . . series in the order of 654, 717!

Last week Harold Zang, from the league's top team, rolled a 236 game, a 607 series . . . both scratch scores.

League standings for	UW.
Геат	W
Instrument Engineers	18
Anodes	16
Fireballs	16
Jaguars	15
Sunflowers	15
Badgers	14
Rollmasters	12
Rounders	12
Purple Pygmies	8
Parbusters	8





COMPLETE TRAINING COURSE—Assembly Division congratulates the nine assemblymen above who recently completed the six-weeks Assembly Training Course. They are, from left, H. D. Reno, J. L. Crabtree, E. G. Malenovsky, O. J. Bullens, J. L. Scoggins, J. E. Newton, G. L. Bridges, H. L. Smith, and D. T. Novak.

## **Crushed Fingers Bring**

Y-12 sustained its first lost-time accident of 1971 on February 1, as an empolyee in the Fabrication Division crushed two fingers on a head stock cover of a lathe.

The disabling injury crushed tendons on the two middle fingers of the employee's left hand. Fortunately, no amputation or bone loss was necessary.

The current string of accidentfree days ended at 44, for approximately 1,446,000 man-hours.

#### Smelters Maintain Scant Lead in Classic Bowling

The Smelters stay barely in the lead in the Classic Bowling race after five weeks of play in the second half.

Old-timers in the league have been bowling like pros of late, as J. C. Kendig, Smelters, posted a 240, 255 single; 662, 707 handicap series, January 28. Frank Thurman, Splinters, sailed into a 234 scratch, 258 handicap game last week.

Jim (Red) Halsey, in a non-Y-12 league, recently came near a perfect game . . . 296, missing four pins in the final fling! That's about as close as you can get.

League standings follow: Swingsters Bumpers Has Beens Cubs
Playboys
Splinters
Rebels
Rojo's
Tigers
Screwballs
Eagles

#### SAFETY SCOREBOARD

The Y-12 Plant Has Operated Six Days Or 204,000 Man-Hours (Unofficial Estimate) Through February 7 Without A Disabling Injury SAFETY AT HOME,

AT WORK, AT PLAY

### Bronze Star Goes to Goldstein, Mook Lead Y-12 First Lost-Timer Sp-4 Wayne Perry



Sp/4 Wayne Perry

Specialist Fourth Class Wayne Perry has been awarded the Bronze Star for "meritorious service in connection with ground operations against a hostile force" in the Republic of Vietnam. Perry was in Vietnam from October 1, 1969, to July 31, 1970, with the 101st Airborne Division.

He is currently stationed at

Fort Carson, Colo. Specialist Perry says anyone with a weight problem might try

a tour of duty in Vietnam. After carrying his back pack there on Tiger Patrol, he lost 50 pounds! Perry, a Karns High School

graduate, is the son of Mr. and Mrs. Virgil L. Perry, Route 18, Hazelnut Drive, Knoxville. His father is in Y-12's Area Five Maintenance.

### Y-12 Milestones

(Continued from Page 3) Carl Leach, Beta Four Heavy Machine Shop, February 8.

10 YEARS

Doris S. Sartelle, Special Production Scheduling and Coordi-

nating, February 8. John Blackburn, Buildings, Grounds and Maintenance Shops, February 9.

Josephine S. Oldham, Special Production Scheduling and Coordinating, January 30.

## **Table Tennis Leagues**

Table Tennis, under way for Y-12ers and Lab men have divided again into two leagues.

Jerry Goldstein heads the Y League, after a sweeping win last week over Ralph Einstein.

Y standings follow:	
Player W	I
Jerry Goldstein, X-10 10	
Gordon Brewer, Y-12 8	
Ralph Einstein, X-10 8	
Nasib Senghal, X-10 8	
Al King, Y-12 7	
John Michel, X-10 7	
James Anderson, Y-12 0	1
Paul Hicks, Y-12 0	1
In the X League Herb	Mool
and Loyd Wyatt are neek t	o nool

and Loyd Wyatt are neck-to-neck in showing up for the top berth. Mook downed Bob Durham, last week, Wyatt took Jerry Keyes, both for the full count.

Player	W
Herb Mook, X-10	10
Loyd Wyatt, Y-12	9
Roy Huddleston, Y-12	
Joe Rich, X-10	8
Bill Motley, Y-12	6
Bob Durham, X-10	3
Dave Holmes, X-10	
Jerry Keyes, Y-12	0
	_

#### Mix Ups Claim Crown In Starlite's 1st Half

The Mix Ups claimed the first half title in the Carbide Starlite League, by a mere one point over the Raiders . . . but five ahead of the next contender. They downed the Splitters for two on final play. F. Kitts, Latecomers, ran through a 246 scratch, 267 handicap game

on January 28 for star honors. First half standings

rust nan standings.		
Team	W	L
Mix Ups	. 38	16
Raiders	. 37	17
Latecomers	. 33	21
Woodpeckers	. 31	23
Wildcats	301/2	231
Pin Boys		29
Comets	. 25	29
Marauders	. 24	30
Splitters	131/2	401
Rollers	. 13	41

The League began second half action last week as the Woodpeckers' H. Gerth polished off a 223 scratch game.

Team	2.4	w
Splitters		3
Latecomers .		3
Rollers		2
Wildcats		2
Woodpeckers		2
Comets		1
Mix Ups		1
Raiders		
Pin Boys		0
Marauders		

### Y-12 Sets Annual **Bowling Tourney** For March 13, 14

The Recreation Department has released the rules-of-the-road and named a deadline for the March 13, 14 bowling tournament. Saturday's sessions will feature men's teams in the morning (for shift scheduling); and mixed doubles in the afternoon. Regular men's teams will roll Saturday night.

Entry Fees Unchanged

Come Sunday, men's and women's doubles and singles will roll right through. A special session will be set for Sunday morning for shift workers only.

Entry fees will be the same as last year . . . \$2.75 per person per event . . . with 50c listed as an optional all events charge. The breakdown on fees is as follows: \$1.10 prize money and \$1.65 bowling fee. The entire \$1.10 prize fee will be returned 100 percent in prizes.

Entries are now available in Recreation, Building 9711-5, telephone 3-7109; or from League secretaries.

#### ABC, WIBC Sanctioned

All entries must be in by Friday, February 26, at 4:30 p.m. Schedules will be made and given to all entrants.

All bowlers must be members of either ABC or WIBC (if you bowl in a sanctioned league you are a member) and must have bowled a minimum of 15 games between August 1 and February 12. His handicap will be determined from those games. If a player zowls in two different leagues, his highest average will be used.

#### Fees Due Too

A man may bowl singles, doubles, mixed doubles and team rolling. (He may roll on a maximum of two teams . . . his first score will be used in all events counting in case he rolls on more than one team.

Checks or cash must accompany the entry blanks when they are submitted to Recreation.

#### Twisters Keep Command Faculty Club. On Mixed League Alleys

The Twisters still command a Y-12 Mixed Bowling League after a four-point win last week over the Roses 'n Thorns.

the star individual bowler of the week with a 219 single, 248 single handicap game.

Virginia Newby, Goofers, rolled an even 200 scratch game for women's honors!

Team	W	L
Twisters	20	4
Rollers		8
Alley Cats	15	9
Goofers	11	13
Friskies	11	13
Hits & Misses	9	15
Cougars	8	16
Roses 'n Thorns	6	18
		_

### NEWS

Published Bi-Weekly For The Employees Of UNION CARBIDE CORPORATION NUCLEAR DIVISION

JAMES A. YOUNG ..... Editor





Appalachian Industrial Editor's Association

International Association of Business Communicators

OFFICE Post Office Box Y Oak Ridge, Tenn. 37830 Telephone 3-7100 or 3-5345



Two car pool members wanted from East Pasadena, Pennsylvania section, to North Portal, straight day. R. T. Cantrell, plant phone workers who have difficulty in 3-7856, home phone Oak Ridge 483-1700.

> Ride wanted from Windsor Courts, Merchant Road, Norwood Avenue section, Knoxville, to West Portal, straight day. Richard Smith, plant phone 3-7883, home phone Knoxville 688-4777.

Ride wanted or will join car pool from North Hills, Knoxville, to Central Portal, H & J Shift. H. A. Hanna, plant phone 3-5283, home phone Knoxville 522-0587.

Riders wanted from Concord, Farragut sections, via Lovell Road, to West Portal, straight day. J. C. Taylor, plant phone 3-7510, home phone Concord 966-5163.

Ride wanted from West Haven section, Knoxville, to North or Central Portal, straight day. John Hathaway, plant phone 3-7705, home phone Knoxville 546-3567.

Ride wanted from 319 East Drive, Oak Ridge, to North or Central Portal, straight day. Alice Hager, plant phone 3-7295, home phone Oak Ridge 482-4581.

Ride wanted from Glenn Circle, Claxton Area, to North or Central Portal, straight day. Sherman L. Jenkins, plant phone 3-5186, home phone Claxton 945-2027.

### **Environment Topic** For ACS Meeting

"Environmental Problem Assessment at ORNL" is the lecture John H. Gibbons will give for the East Tennessee Section of the American Chemical Society, February 16. It is scheduled for 8 p.m. in Buehler Hall 300 at The University of Tennessee. Dinner begins at 6:30 p.m. at the UT

Gibbons is director of the ORNL-NSF Environmental Program and will discuss new activirather commanding lead in the ties at the Lab's historic and deepening involvement in tackling environmental problems. The new work under National Science Billy Patrick, Alley Cats, was Foundation support is focused on problems related to the impact of electrical energy management and the optimum management of material resources from their source to their introduction into the waste stream. Specific regional problems will be handled in the speech and the flow of noxious materials in our social environment will be covered.

Gibbons received his bachelor's degree in mathematics and chemistry from Randolph-Macon College, Va., and then branched out into physics, receiving his PhD from Duke University in 1954. His background includes 15 years at ORNL as a physicist in the fields of nuclear structure and nuclear geophysics. Among his publica tions are papers on gamma-ray astronomy, and stellar nucleosynthesis and origins of solar system materials. He is a member of the Sierra Club, The Wilderness Society, and Tennessee Citizens for Wilderness Planning.

The lecture is open to the public. Reservations for dinner may be made through Joyce Wallace, Knoxville telephone 974-3271; or Dick Raridon, extension 3-1632.

EARTH—love it or lose it.

Thursday, February 11, 1971



L. E. Paulk

#### THE CARBIDE COURIER

Published Biweekly ditor ...... H. J. Mayberry K-1002 Building, Tel. 3-3097

### **Fabrication Division** Promotes L. E. Paulk

Lucian Edwin Paulk was promoted on February 8 to a planner and estimator in the Development Maintenance Department, Fabrication and Maintenance Division. He had been working here as an electrical mechanic since March, 1951. Before coming with us he worked with his father, an electrical contractor in Aberdeen,

Paulk was born in Lee County, Miss. He completed public schools in Aberdeen and attended Mississippi State University. Mrs. Paulk is the former Earline Scott of Aberdeen. They have two boys, Lucian Edwin Jr., 21, a senior at Middle Tennessee State University, and James Scott, 17, a senior in Roane County High. The Paulks reside at 107 Woodlawn Drive, Kingston.

Paulk's outside interests include hunting and gardening.



CREDIT UNION OFFICIALS—The K-25 Credit Union officials line up for 1971 action. Seated, left to right, are B. M. Keeley, E. S. Thompson, Evelyn Cole, V. O. Maggart, G. H. Domres, and M. N. Strickland, Jr. Standing are L. W. Atherton, H. R. Bryan, V. B. Goddard, D. R. Carter, H. L. Mins, C. B. Russell, J. M. Shumpert and C. E. Goodman. B. D. Dixon was not present for the picture-taking.

### Dr. Iris Snider Latest Addition To K-25 Medical Department In State Bowling!

on January 4 as an industrial phy-Industrial Relations Division. She came here after completing a residency in pediatrics, the first year and last year at University Hospital in Knoxville.

Okla., and raised in Maryville. She received a BS degree from UT in an illness. Knoxville and her MD from The University of Tennessee Medical School in Memphis. She is married to Dr. James Slowey from Nashville who is completing his residency in obstetrics and gynecology at UT Hospital in Knoxville. They have a son Jimmy, 16 months old, and reside at 314 High Street, Maryville.

When asked why she went by her maiden name, Dr. Snider explained that her diplomas are made out that way and that while they were both interning in Memphis, a call on the inter-com for Dr. Slowey would have been confusing as to whether they wanted Dr. Iris or Dr. Jimmy.

Dr. Snider's outside interests,

Dr. Iris Snider came to K-25 | include cooking, raising a large garden, playing bridge and helpsician in the Medical Department, ing her husband raise Labrador retrievers. She stated that this is quite a change from residency duties but regards the field of inat the City of Memphis Hospital dustrial medicine along with pediatrics and public health service as a challenge in that the empha-Dr. Snider was born in Enid, sis is more on prevention of disease rather than on treatment of

A hearty welcome to Dr. Sni-



Waddell Place, Oak From Ridge, to K-33 parking lot, 8:00 to 4:30 shift. C. C. Dawn, phone 3-9219, home 483-9776.

He who boasts about tomorrow's victories did the same thing yesterday.



Dr. Iris Snider

Final results of the Tennessee Men's Bowling Tournament have recently been announced. This tournament was held at Columbia, Tenn., finishing on December

Jim Corn was a member of the Dammits, the first place team out of 184 teams entered. This is the first time since 1959 that an Oak Ridge team won the state tournament.

John Sharp bowled with the Oak Terrace Lane team that finished in 12th place. Sharp also teamed with L. B. Schneider to win 18th place out of 427 entries in the doubles event.

The All Stars composed entirely of K-25ers placed 23rd in the team event. Members of the All Stars were Claude Jones, Millard Gibson, Harold Gunter, John Peer and Charley Hale.

Claude Jones placed 10th and Charley Hale ranked 13th out of 659 entries in All Events. Jones also placed 81st out of 854 entries in the singles competition. Clayton Mathis was number 33 in sin-

### Women's Bowling

Mary Foley had most of the honors in the January 26 session of the Women's League. She had a scratch single game score of 190 and had a 551-620 series. Lola Byrd had the best handicap single game with a 235 and tied Mary's 620 handicap series.

Mary Hughes and Peggy Harris shared Bowler-of-the-Week honors in the January 19 session. Mary had the best single game with 192-238 and Peggy's 505-616 was high series score.

#### Standings

Pay-offs Pin-ups **Up-Towners** Spotters

7 Wood Bees 6 Hot Shots

5 Bowlettes

### K-25ers Place High K-25 Credit Union Declares 1970 Another Banner Year!

The K-25 Employees Federal Credit Union held their 21st Anter, with approximately 125 members attending. C. B. Russell gave the invocation. After welcoming the members and introducing the officials and office staff, the President gave his annual report. L. O. Maggart said, among other things, that the Board of Directors had approved the paying of a 5.4 percent dividend which has been posted to accounts as of January 5, 1971. The Federal Bureau authorized a change in by-laws whereby any member who terminates or retires from the company will no longer be eligible to be elected to an office in the Credit Union; however, if they are serving at the time of their retirement or termination they may continue to serve until the term for which they were elected expires. Maggart also announced that the Credit Union now has Federal Share Insurance on each account and that the maximum any employee member may have in his account has been raised from \$6,000 to \$10,000. If all goes well, we should be in our new Credit Union building by April 1; and, if this does happen, then the Credit Union will pay semi-annual dividends this year.

'Best of Any'

E. S. Thompson, Treasurer, reviewed the Treasurer's report, pointing out that loans increased \$336,000 over 1970; investments decreased \$400,000; shares decreased \$100,000, income increased \$16,00, and profits increased \$9,-

C. B. Russell gave a farewell speech in which he mentioned that he felt K-25 has one of the mer Ruby Huskey. Other immedibest Credit Unions of any. He based this statement on his long association with Credit Union 2 people from throughout Tennes-5 Hits & Misses 0 see and the Nation.

E. S. Thompson and B. M. Kelley were re-elected to the Board nual Meeting on January 25, 1971, of Directors for a two-year term, at the Union Hall in Grove Cen- along with D. R. Carter who replaces Russell because of his retirement. V. B. Goddard was unanimously re-elected to the Credit Committee.

#### Door Prize Winners

Charley F. Hale and Martha M. Wright won the two radios which were given as door prizes; along with Ray Cooper, R. P. Thomas, and U. C. Walker who each won a country ham.

Following the annual meeting the Board of Directors held a special meeting in which they elected V. O. Maggart, president; G. H. Donres, vice president, E. S. Thompson, treasurer, and Evelyn Cole, secretary.

#### Reproduction's Rolen Dies in Knox Hospital

Gordon Reece Rolen, 41, senior reproduction clerk in Central Reproduction Services, died Thursday, January 21, at the Univer-

sity Hospital in Knoxville.

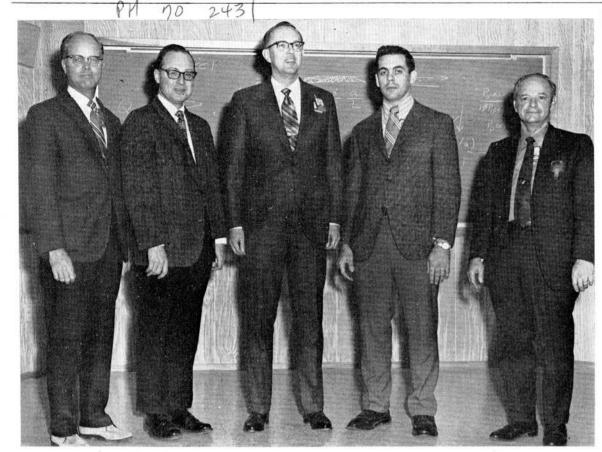
He had been



G. R. Rolen 1948 to January 1952.

employed here since May, 1952. Before coming with us he had served in the U. S. Army Message Center in the Pentagon from October

Mr. Rolen was born and completed public schools in Sevierville, Tenn. Mrs. Rolen is the forate survivors include three sons, Michael Lee, Roger Dale and Jeffry Allan and a daughter Barbara Gail, at the Rolen home on Route 20, Ball Road, Knoxville.



SEMINAR PARTICIPANTS—These men met in December to discuss results of basic research studies related to the gaseous diffusion process. From left, R. M. McGill, S. Prager, R. D. Bundy, W. K. Brown and A. S. Berman. Prager and Berman are consultants at K-25 and are both from the University of Minnesota. McGill, Bundy and Brown are in the Experimental Barrier Development Department of the Gaseous Diffusion Development Division.

### Schedules Are Set For This Summer's Golf Tournaments

The schedule for the 1971 K-25 Golf Tournaments has now been confirmed. There will be five tournaments again this year starting April 24, the last one to be held on September 11.

These are handicap tourna-ments. Each golfer's handicap will be figured using the best D. E. V nine-hole scores from the corresponding number of tournaments, up to a maximum of the last five tournaments played starting in 1965. For example, if a golfer has played in two tour- R. L. naments starting since 1965, he W. H. will use his two best nine-hole M. D. scores-for five tournaments, his R. H. five best nine-hole scores.

Handicaps will be calculated on the basis of 80% of the difference between par 36 and the golfer's average score on his best nine holes played. A new golfer or one who has not played in a K-25 Tournament since 1965 will play with a blind handicap, computer separately for each nine holes.

#### 1971 TOURNAMENT SCHEDULE

Golfers Clip and Save April 24-Whittle Springs,

Knoxville May 22-Wallace Hills,

Maryville Southwest Point, June 26-Kingston

-Cedar Hills, Lenoir City September 11—Gatlinburg



rush'-it's those who leave earlier to avoid the 'five-o'clock-

### K-25ers With 30 Years Plus in Service!

K-25 has 14 employees who have over 30 years of company service up to the start of calendar year 1971. Here is a list of those employees, chronologically by Company Service Date, giving where they were transferred from and the date each employee arrived in Oak Ridge.

Name	C.S.D.	Transferred From Arr	ived O.R.
G. A. Smith	9-4-28	Carbon Products, Cleveland, O.	5-24-45
A. F. Stephenson	8-23-29	Chemicals, S. Charleston	4-1-44
R. G. Ingram	10-24-29	Chemicals, S. Charleston	4-1-44
A. P. Jago	2-1-32	Metals, Duluth, Minn.	3-4-44
D. E. Williams	10-12-32	Chemicals, S. Charleston	4-1-44
T. W. Morton	9-16-33	Chemicals, Institute	3-1-45
J. H. Allen	12-13-33	Chemicals, S. Charleston	4-1-44
E. S. Robinson	10-9-34	Chemicals, S. Charleston	3-20-44
K. H. Morrison	3-23-36	Chemicals, Institute	3-1-45
R. L. Rollins	7-20-36	Chemicals, Leach, Ky.	3-11-44
W. H. Hall	9-1-36	Chemicals, S. Charleston	5-24-44
M. D. Roach	12-1-36	Chemicals, S. Charleston	4-30-45
R. H. Davidson	12-31-36	Chemicals, S. Charleston	4-25-44
F. B. Tredinnick	7-1-40	Linde, New York, N. Y.	12-1-51

## What Can I Do

A recent issue of the Courier carried 10 suggestions as to what we, as individuals, can do to reduce pollution. There follows eight additional tips from a recent publication that we can all ob-

1. Do not burn leaves and trash. Start a mulch pile.

2. Do not use persistent pesticides such as DDT, Aldrin, Dieldrin, heptachlor, endrin, Lindane, Chlordane.

3. Do not flush waste oil down the sewer. Haul it to garbage

4. Do not overuse water.

5. Stop littering. If you see a litterbug, pick up his discard and politely hand it back to him.
6. Do not buy alligator purses,

leopard coats or any product made from skins or feathers of endangered species. Boycott dealers who sell them. Shame acquaintances who buy them.

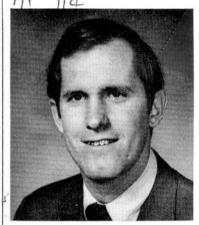
7. Inform yourself, then write a letter to your local newspaper editor on any ecological issue about which you feel strongly. Or call him.

8. Write, phone, or tell your views to your township supervisor, alderman, state representative, or Congressman.



WOY - Mrs. Bob Hughes, Clyde Terry's daughter, was recently named 'Woman of the Year' by the Statesville (N.C.) Jaycettes. Clyde is a maintenance foreman in the Fabrication Shop. Mrs. Hughes has served as treasurer for the Jaycettes and was business manager and chaperone for 'Miss Statesville, 1970.'

### **Co-Opper Robinson About Pollution? Comes to Work Here**



Gregg Robinson

After working here as a co-op student, Gregg Robinson decided that K-25 was the place for him to accept full-time employment following his graduation from UT last December. He is now working as an industrial engineer in Maintenance Engineering Department, Fabrication and Maintenance Division.

Gregg graduated with high honors from UT with a BS degree in Industrial Management. He entered the co-op program at the start of his junior year and worked three quarters here in the plant, all in the Maintenance Division.

Robinson was born in Hackensack, N. J. He completed his public school education in Oak Ridge. He is the son of Mr. and Mrs. Berwyn Robinson (his father is with the AEC in the Production Division.)

While in UT, Gregg participated in track. He was president of the University Chapter of the Society for the Advancement of Management.

Gregg said, "I thoroughly enjoyed my co-op experience and feel that this is the best way to go through school. I received some challenging assignments and good experience working here on the job. I had several job offers but decided on Carbide because I knew a number of people here and I was impressed with their operations."

Gregg plans to work toward an advanced degree using Carbide's Educational Assistance Program.

### Wednesday

### **Bowling League**

The Mix-Ups took four points in the January 27 session to take over the top spot since the previous co-leaders, the Planners and the Rookies, both lost all four. Seth Wheatley's 703 handicap series was the second high for the season. Each game was over 200 scratch and his high game was a 233-256 for the weekly high prize.

The Sandbaggers got hot on the 20th. They had the second best game of the season with a 1093 and a very good 2977 series. They were led by Bowler-of-the-Week, Pritchard, who had a 220-259 game and a 570-687 series. Bob Browell assisted with a 654 han-

dicap series. Mix-Ups 11 Demons 6 Planners 10 Sandbaggers Rookies 10 Amps 6 8 Feezers 6 Pirates

#### SAFETY SCOREBOARD

**OUR PLANT** Has Operated 255,304 Safe Hours Through February 4

Since last disabling injury on January 18



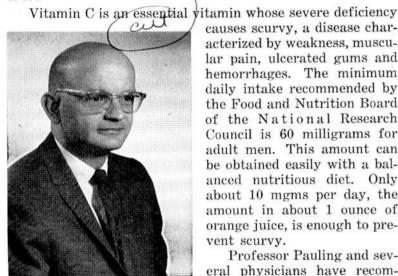
WEDDING CAKE BREAK-Girls in Engineering recently gave Doris Wood a Cake Break to celebrate her marriage to Richard R. Frazier. The ceremony took place at Broadway Baptist Church, Knoxville, January 15. Doris is in Facilities Engineering, transferring from Accounts Payable last August. She came here in June of 1957. Frazier is with Knoxville Utilities Board. The newlyweds are living in Knoxville.

Fad, Faith or Fact?

### Vitamin C for the Common Cold

By T. A. LINCOLN, M.D.

The latest "fad" in the treatment of the common cold is large doses of Vitamin C. Linus Pauling, holder of two Nobel Prizes in Chemistry and in Peace, and Professor of Chemistry at Stanford University, has been an enthusiastic proponent. His book, Vitamin C and the Common Cold, is full of enthusiasm but remarkable for its lack of scientific objectivity. The big question on most people's minds is, "Is there anything



Dr. Lincoln

causes scurvy, a disease characterized by weakness, muscular pain, ulcerated gums and hemorrhages. The minimum daily intake recommended by the Food and Nutrition Board of the National Research Council is 60 milligrams for adult men. This amount can be obtained easily with a balanced nutritious diet. Only about 10 mgms per day, the amount in about 1 ounce of orange juice, is enough to prevent scurvy.

Professor Pauling and several physicians have recommended doses of from 1000 to 5000 mgms. per day for pre-

vention of the common cold and up to 15,000 mgm. per day for treatment. In support of this high dose, Pauling cites a small number of studies which have failed to show any significant effect at low dose rates. Several studies using 200 to 1000 mgm. per day have appeared to show a beneficial effect. His best support comes from a study by Dr. Edme Regnier of Salem, Mass. He followed for five years a group of 22, 5 of whom were children, who used 600 mgms, every three hours after the onset of symptoms and 750 mgms. at bedtime. This study was not rigidly controlled since he discontinued using "blind" (placebo) controls because his subjects "knew" when they were not receiving the Vitamin C.

A quote from Dr. Regnier's report, which appeared in the September and October, 1968, issue of the Review of Allergy, illustrates how casually this study was performed. "In this small group of subjects there was not one who failed to obtain successful results as regards his symptomatic response if his intake of ascorbic acid was both sufficient and well timed. Judgment as to the successful suppression of the symptoms of a cold must, at some point, be subjective and cannot be a quantitative and therefore measureable value, but as far as the subjects themselves were concerned there was no question on this point because the suppression of the symptoms was so gratifying.'

Pauling does appear to be correct when he claims that the concentration of ascorbic acid in the blood, and presumably most of the tissues, can be raised to a high level. The argument, that any amount of ascorbic acid absorbed which is in excess of a "normal" saturation dose will be rapidly excreted, can be easily overcome. Some physicians who wish to ridicule the high dose regimen comment that most of it goes down the commode and the tissue level never goes up. Even though a large amount is excreted rapidly in the urine, by keeping the intake dose higher than the excretion rate, it is possible to build up tissue concentration much higher than normal.

Ideally, two randomly selected groups of adults similar in age, number and age of their children at home, quality of housing, level of air pollution, smoking habits, general standard of living and freedom from known conditions which might predispose to colds should be studied. One-half should receive pills containing the high dose amount of ascorbic acid and the other half a placebo. Rigid criteria for what constitutes an impending or established cold should be established. Every scratchy throat or sniffles is not an upper respiratory infection.

The pills would be dispensed in no more than one week's supply at a time and a careful review of the previous week's experience would be made by a specially trained nurse. A large number of people would need to be studied over a long period of time, both while taking the active ingredient and while on the placebo. Then, maybe, the efficacy could be determined. A school or industrial population would be ideal

## **Volleyball Contest**

Action began the last week in January in Volleyball, as the Pack took two games from the K-25 Hawks 15-7 and 15-13, losing the first one. The ORNL Old Men took a sweep from the Gooneybirds, 15-8, 15-10 and 15-8. The Gang galloped over the Quarks 15-12, 15-5 and 15-3. Finally, the Y-12 Old Men trimmed the Environmentalists 16-14 and 15-9, and lost the last one 15-7.

Meanwhile on Court B, AECOP's Foibles defeated the Eagles 15-8, then dropped the next two 15-7 and 15-7. The Set Ups sank the Boomerangs 15-4 and 15-8; then the 'Rangs boomeranged to win number three 15-8. And finally, the Bombers belted the Radpheys 15-11; then the Radpheys took over 15-12 and 16-14.

Last week action started on Court A as the Quarks downed Y-12's Old Men 15-10 and 15-11 the Men taking game two 16-14. The Gang demolished the Foibles 15-11, 15-0 and 15-10. The ORNL Old Men reduced the Radpheys 15-12, 15-3 and 15-12. Meanwhile, on the other court, the Boomerangs beat the Bombers 15-11, 15-14 and 15-11. The Gooneybirds gained three from the Environmentalists 15-13, 15-6 and 15-11. The Pack kept the upper berth by downing the Set Ups 15-8, 15-2 and 15-6.

League standings follow:

Team	w
The Pack, ORNL	20
K-25 Hawks	
The Gang, K-25	18
ORNL Old Men	
Set Ups, ORNL	13
Radpheys, ORNL	11
AECOP's Foibles, K-25	
Eagles, Y-12	8
Quarks, K-25	8
Y-12 Old Men	7
Bombers, ORNL	5
Gooneybirds, ORNL	4
Environmentalists, ORNL	2

since they could be kept under close observation

In the meantime, it is worth remembering that large doses of ascorbic acid can cause precipitation of urate and cystine stones in the kidneys, especially in patients with chronic urinary tract infections. Diabetics who test their urine for sugar using Testape or one of the "dip" sticks should realize that the excretion of large amounts of ascorbic acid makes these tests unreliable.

Before consuming large quantities of Vitamin C to prevent or cure the common cold, one should wait until adequate testing has been completed. The treatment is relatively harmless and inexpensive, but unless one is a person who is easily cured by faith alone, the method must be considered untested.

Everyone hopes there is something to this high dose Vitamin C treatment. Faith may mountains" but colds are virus infections and unless this treatment really works, it will pass like the hundreds of fads which have preceded it.



### The Pack Loses 1st Carbide's 1970 Sales Are Up; **But Earnings Dip 14 Percent**

Union Carbide Corporation's 1970 worldwide sales increased to a new record of \$3,026,000, three percent higher than the 1969 total of \$2,933,000, according to a recent announcement from Birny Mason, Jr. Earnings were \$159,-400,000, or \$2.64 a share, 14 percent below the \$186,200,000, or \$3.08 a share, earned in 1969. Mason noted that the 1969 earnings figure included a nonrecurring capital gain of nine cents a share resulting from the sale of a subsidiary. If this is excluded, the earnings decline in 1970 amounts to 12

Sales for the fourth quarter amounted to \$767,500,000, an increase of one percent over the 1969 fourth-quarter figure of \$761,500,000. Indicated fourth-quarter earnings came to \$37,-800,000, or 63 cents a share, as compared with \$41,400,000, or 69 cents a share, for the fourth quarter of 1969. Mason remarked that fourth-quarter results were depressed by the effect of the General Motors strike, which reduced Union Carbide's sales by about \$25,000,000 and earnings by an estimated eight cents a share.

#### **Domestic, Overseas Conditions Differ**

Mason noted that the corporation's effective tax rate for the fourth-quarter was about 35 percent, as compared with 45.7 percent for the first nine months. For the full year 1970, the tax rate was virtually unchanged from the 1969 figure of 43.1 percent.

Speaking of business conditions during 1970, Mason said that there was a notable difference in Union Carbide's results domestically and overseas. Domestic sales were markedly affected by the progressive deterioration of the U.S. economy. They totaled \$2,156,000,000 as compared with \$2,164,600,000in 1969. Sluggish conditions, especially in the automotive, textile, housing, and furniture industries, affected particularly the corporation's chemicals and plastics group, sales of which were slightly below those for 1969. The gases, metals, and carbons group had a modest sales gain domestically, as did the consumer and related products group.

#### **Business Decline and Inflation Cited**

International sales showed good growth throughout the year, totaling 13 percent more than in 1969. There were strong gains in all major world areas, including Canada, Latin America, Europe, Africa, and the Far East.

Commenting on the earnings results, Mason said that the most important reason for the decline was the general business recession in the United States, accompanied by continuing inflationary pressure on costs. "This past year," he said, "we made gratifying progress in improving the efficiency of our plant operations and in weeding out and discontinuing marginal and unprofitable activities. However, in the face of virtually static domestic sales, this improvement has not been enough to offset the higher costs that we have been forced to absorb."

Union Carbide's domestic selling prices rose about three percent over 1969, the first significant increase in many years. This, Mason said, was still well below the composite increases in costs of labor and purchased goods and services, including materials, fuel, power, and transportation.

#### Profits Picture Relies on 'Selectivity'

A number of specific actions to improve efficiency and to dispose of underutilized assets were mentioned, taken primarily in the fourth-quarter, with the net effect of reducing reported earnings by one cent a share. Charges aggregating \$18,500,000, equivalent to 18 cents a share after tax, resulted from the write-off of a chloromethane facility, other abnormal retirements and cancellations, the sale of a subsidiary producing mattresses, and the conclusion of the sale of the semiconductor business. These were essentially offset by gains aggregating \$15,000,000, equivalent to 17 cents a share after tax, resulting from the sale of coal properties and other surplus real estate and from the restructuring of the corporation's interests in the tin business in the Far East.

Mason emphasized that the corporation was continuing its program of examining its businesses and eliminating those that no longer appear promising for future growth. "We believe," he said, "that an important key to improved profitability lies in greater selectivity. This means concentrating on those things we do best, and getting rid of those we do not do so well." Mason further noted that Union Carbide's domestic employment had dropped from 60,946 at the end of 1969 to 57,495 at the end of 1970.

#### 1971 Forecast Relies on U. S. Economy

Desirable businesses will continue to receive adequate support, according to the Carbide executive, both in the form (Continued on Page 6)

### Union Carbide's 1970 Sales

of capital funds for expansion and through maintained or increased research and development effort. He noted that capital expenditures in 1970 had amounted to \$390,000,000, an increase of \$68,000,000 over 1969. Capital expenditures in 1971 are expected to be about the same as in 1970. About 75 percent of the 1970 total was spent within the United States and Puerto Rico, and the remainder elsewhere. Construction of the major chemicals and plastics complex in Puerto Rico is proceeding on schedule, with initial operation expected late

Mason was unwilling to make firm predictions concerning Union Carbide's performance in 1971. He observed that many of the company's facilities were operating below capacity, and this, coupled with improvements in efficiency already accomplished and expected, placed the corporation in a good position to benefit from a business pickup. Mason said, however, "We will have to see a significant improvement in the general level of the domestic economy, as well as some reduction in inflationary pressures, before we can achieve a significant earnings improvement."

#### 'Fences Down'

said. "I'm not alone in this opinion. The Tennessee Valley Authority is already committed at Brown's Ferry, at Sequoyah, and at Watts Bar to atomic power to the tune of about nine million kilowatts. That's about 100 times the generating capacity at Norris Dam and almost 50 percent of TVA's current total nonnuclear capacity.'

While he discussed the work being done at the gaseous diffusion plant, the breeder reactor effort, and making energy available through controlled nuclear fusion, he also emphasized the human energy-or vitality-which he said "typified the work at Oak Ridge since its inception.'

"As a result, we have clearly demonstrated to the world that nuclear materials developed as an instrument of defense can also serve as a vital source of economic electric energy," he stated. "Our success in this effort has been due to many factors. High among these is the quality of the people we have been able to recruit from this area. I am confident that the people of East Tennessee will do their part in assuring even more significant contributions in the years ahead," he concluded.

#### 'View from Bridge' **Tryouts Set Monday**

Tryouts will be held at the Oak Ridge Playhouse Monday, February 15, at 7:30 p.m. for 15 roles in Arthur Miller's drama, "A View from the Bridge." Three women. one in her early twenties, the other two in their forties, and 12 men, ranging from ages 25 up, are required for the cast. Tryouts are open to everyone in this area. Those new to the Playhouse are extended a special invitation to read for a part. Past theatrical experience is not required.

"A View from the Bridge" is an absorbing story of a man's fatal passion for a young girl, that eventually plunges him into catastrophe. The action takes place in and around the apartment of Eddie and his wife, Beatrice, and their niece, the very pretty Catherine. There are major and minor roles both in the intriguing drama, one cast member required . . . a blond young man who can sing.

Rehearsals will begin in March and the play will open for six performances on April 23.

In a free society, only some are guilty of wrongdoing, but all are responsible.

### Weathersby Scoops January Skeeting!

Y-12's W. E. Weathersby, P. W. Bullard and ORNL's D. N. Fry captured first, second and third place in firings in the year's first Skeet League competition, Janu-

Weathersby scored a high 49.-541, leading all firers including those suffering from penalties from previous winnings.

Tonuany Cleast Cossess	
January Skeet Scores:	
Firer H'C	ap Score
R. A. Allstun, Y-12 C. Asmanes, Y-12	47.774
C. Asmanes, Y-12	47.307
C. G. Brewster, Y-12	48 085
W. E. Brundage, ORNL	47 491
P. W. Bullard, Y-12	49 179
J. M. Case, Y-12	48 708
J. B. Comolander, Y-12	46 625
W. H. Davy, Sr., K-25	47.756
W H Davy In OPNI	40.049
W. H. Davy, Jr., ORNL	40.042
B. S. Denton, Y-12 B. F. Etheredge, Y-12	48.560
B. F. Etheredge, Y-12	48.845
D. N. Fry, ORNL	48.964
B. L. Powers, Y-12	49.327*
V. Raaen, K-25	47.391
A. K. Van Hull, Y-12	48.654
W. E. Weathersby, Y-12	49.541
T. R. Webber, Y-12	48.206
F. G. Welfare, ORNL	46.625
J. M. Guttery, Y-12	

#### **Certifying Workshops** Begun by Local SNT

The Oak Ridge Section of the American Society for Nondestructive Testing is again sponsoring the Educational Workshop featuring Certification of Nondestructive Personnel and Radiographic Testing Level I and II.

All sessions are being conducted in the Y-12 plant, at the Training and Technical Building.

The sessions began with registration February 9, and extend through next Thursday, February

Instructors include Tom Cabe, Benny Houser, and Ron Green from Y-12; Lawrence Poole, K-25; and Ralph Turner, Kodak Com-

The session will cover the following topics: Radiation Sources, Radiation Detection, Personnel Safety, Radiation Protection, and Radiographic Processes.

A certification of completion will be awarded each person attending the workshop.

#### **Quality Control Group** To Hear Jones' Paper

The Tennessee Section of the American Society for Quality Control will meet Monday, February 22, at the Holiday Inn, Oak Ridge, in a dinner meeting.

Dinner, with reservations made through Bob Lucke, extension 3-5021, begins at 7 p.m.

Fred W. Jones, head of Y-12's Fabrication Systems Development Department, will speak on "Performance Evaluation of Precision to attend February's meeting.

### GBU's Down Two Foes in Basketball

The GBU's still hold uncontested reins in the big Basketball League, now claiming eight wins, no

On January 25, they were tied part of the time by the Untouchables but came out of it, winning 66 to 49. Grant Hill and Johnny Williams were gallant in their efforts for the losers on the boards. Bud Defenderfer sparked the winners with 22 points.

The Hawks downed the Wild Bunch 59 to 37, with Gary Ellis the big points and rebound man. Don Forrester managed to keep the Bunch in the game.

#### Slow-Moving Game

The Mod Squad came from behind to down the Bottlenecks 30 to 28 in a slow-moving contest. Tim Butler managed to carry the load for the Bottlenecks, both in scoring and rebounding.

The Shoestrings tied the James Gang 54 to 30 in the final game for the night. Jerry Brown sparked the big team, with 18 points, matched by Bruce Marshall, with

The CC 69ers won a forfeit game from the Demons.

The Carbide Trojans eked by the Beta Two Miners 53 to 51 as Ron Milligan waxed hot for the losers, sinking 26 through the basket. Churchill Moore led the victims with 16 points; Fred Linson, 14, for the winners.

#### GBU's Win No. 8

Last week's play began as the Shoestrings laced the Hawks 61 to 48. The Hawks gave the 'Strings a good run for their money but big Jerry Brown used his weight and height to a good advantage as he reached up for 29 points. Bill Pointer, although only about five-nine hit 22 points and got more than his share of rebounds.

The GBU's got their eighth victory at the expense of the Bottlenecks. The score was 65 to 40. The 'Necks were supposed to be easy prey for the GBU's, but the big team had to keep moving in a rough and tumble battle, with the outcome being decided by the big guns from the GU side.

The Beta Two Miners showed up; the Untouchables didn't, for the forfeit game Wednesday.

#### 69ers Win Big

The CC 69ers took the Wild Bunch 81 to 52. The 69ers' Conner, Hightower and Angel paced the big team. Don Forrester, as usual, led the Wild ones.

In the week's final game the Trojans out-lasted the Mod Squad 58 to 54 in a close one.

Churchill Moore again came to the forefront, scoring 31 points. Fred Linson dropped 20 points through.

League standings follow: Team
GBU's, Y-12
Storestrings, Y-12
CC 68ers, K-25
James Gang, K-25
Untouchables, Y-12
Beta Two Miners, Y-12
K-25 Trojans
Hawks, Y-12
Bottlenecks, Y-12
Bottlenecks, Y-12 Bottlenecks, Y-12 Wild Bunch, Y-12 Mod Squad, Y-12 Demons, Y-12

Numerically Controlled Turning Equipment." The paper describes techniques used in evaluating the performance of machine tools controlled by programmed tapes. The evaluation was part of a continuing program of modernizing manufacturing equipment in Y-12.

This is the paper Jones gave in Birmingham, England in September of last year, before the International Machine Tool Design and Research Conference.

All ASQC members are urged



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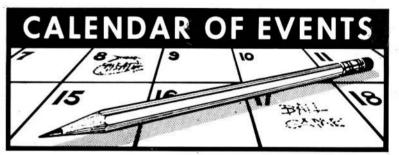
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### TECHNICAL

February 12

Physics Division Seminar: ORMAK - Progress, Program, and Promise," M. Roberts, Thermonuclear Division. East Auditorium Building 4500N, 3 p.m.

#### February 16

Joint Chemistry and Physics Division Seminar: "Charge Transfer and Cruve Crossing in Atomic and Ionic Collisions," R. S. Berry, University of Chicago. East Auditorium, Building 4500N, 10 a.m.

ORNL Environmental Seminar: 'Plant Operations at X-10 and the Environment," E. J. Witkowski. "Environmental Wrap-up and Review," D. J. Rose. East Auditorium, Building 4500N, 3 p.m.

Civil Defense Research Project Physics Division Seminar: Movie - "R. P. Feynman Lecture Seeking New Laws." East Auditorium, Building 4500N, 1 p.m.

ORAU Medical Division Staff Seminar: "Clinical Importance of the Immunoglobulins in Lymphohistiocytic Disorders," Dr. Joseph Hathaway, Pathologist, St. Mary's Hospital, Knoxville. ORAU Medical Division Main Conference Room, 4 p.m.

#### February 18

Nuclear Power-A Review and Assessment: "Maximum Permissible Levels of Ionizing Radiaton,' K. Z. Morgan. Central Auditorium, Building 4500N, 3 p.m.

#### February 23

ORAU Medical Division Staff Seminar: "In Vitro Studies of Lymphocyte Survival," Francis A. Goswitz. ORAU Medical Division Main Conference Room, 4 p.m.

#### February 24

Metals and Ceramics Division Seminar: "Performance Characteristics and Engineering Problems of Potassium-Steam Binary

#### **Investment Clubs Set** Meeting in Knoxville

Margin accounts, options, and commodity trading will be explained at the February meeting of the East Tennessee Council, debaker cars; Reo and Interna-National Association of Investment Clubs

The meeting is set for Monday, February 15, at 7:30 p.m. at the Knoxville State Area Vocational Technical School, 1100 Liberty St., Knoxville. Fred O. Rogers, Reynolds and Co., stockbrokers, will speak on "Leverage in Buy-ing Securities," discussing shortselling. Mrs. C. H. Nowlin of Mad Money Makers Investment Club of Oak Ridge will discuss the proper use of stock selection guides.

The meeting is open to all interested investors without charge. 3-4601.

Power Cycles," A. P. Fraas. East Auditorium, Building 4500N, 2:45

Nuclear Power-A Review and Assessment: "Somatic Effects of Low-Level Radiation," John B. Storer. Central Auditorium, Building 4500N, 3 p.m.

#### February 25

Biomedical Graduate School Student Lecture Series: (Title to be announced.) Melvin Simpson. State University of New York at Stony Brook. Large Conference Room, Building 9207, 3:30 p.m.

#### COMMUNITY February 11, 13, 14

"Dear Me, The Sky is Falling." Beth El Temple. A comedy, at the Oak Ridge Playhouse, Jackson Square, 8:15 p.m. Admission: \$2.25, students, \$1.25.

#### February 12

Dvorak String Quartet, ORCMA, Oak Ridge Playhouse, 8:15 p.m. Admission: \$4, students \$2.

#### February 15

Oak Ridge Playhouse Tryouts: 'A View from the Bridge." 7:30 February 19-20

"Three Sounds of Tennessee" Sweet Adelines, Oak Ridge Playhouse, 8 p.m. Admission: \$2.50.

### February 19, 20, 22

"Diary of Anne Frank", Masquers. Oak Ridge High School Auditorium. Admission: Adults \$2, students \$1.

#### February 21

The Oak Ridge Art Center Film Club presents the famous Nazi propaganda film, "Triumph of the Will." Jefferson Junior High School, 8 p.m. Admission: Adults \$1; students 75 cents.

### Interest Is High In Surplus Sales

More than 6,000 bids were received on the 139 items offered for sale as surplus government property last month at the Oak Ridge Gaseous Diffusion Plant.

Offered for sale were used Chevrolet, Dodge, Ford, and Stutional trucks; Dodge and Chevrolet vans, carryalls, and station wagons; GMC and Superior busses; and miscellaneous boating and office equipment. The sales were open to the public.

Similar spot-bid sales are held about twice each year, as enough surplus equipment accumulates. The next one will be held sometime in 1971 and advance notice will be in the plant papers.

The surplus equipment can be seen at the Power House Area, Building K-722, in the ORGDP area. For more information call